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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/854,040	05/11/2001	Dale E. Gulick	2000.039400/TT3767	8174

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EXAMINER

NORRIS, TREMAYNE M

ART UNIT PAPER NUMBER

2137

DATE MAILED: 07/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 09/854,040	<b>Applicant(s)</b> GULICK, DALE E.	
	<b>Examiner</b> Tremayne M. Norris	<b>Art Unit</b> 2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 May 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/03/2002</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

The information disclosure statement filed 10/03/2002 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered. The non-patent literature was not received by the examiner.

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 25 and 26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. It is unclear where the limitations stated in claims 25 and 26 are taught within the specification.

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3. Claims 11 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 11 and 18 fail to further limit their parent claims.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-40 are rejected under 35 U.S.C. 102(e) as being anticipated by Wells et al (US pat 6,687,721).

Regarding claim 1, Wells teaches a system, comprising:

a memory configured to store data (col.3 lines 14-17); and

a device coupled to the memory, wherein the device includes a random number generator (col.3 line 66 thru col.4 line 1),

wherein the random number generator includes:

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an entropy register configured to receive bits over a plurality of data lines, wherein each of the plurality of data lines couples an individual entry in the entropy register with a corresponding entry in another register (col.5 line 58 thru col.6 line 43).

Regarding claim 2, Wells teaches the random number generator further includes: an entropy control unit configured to provide a value from the entropy register in response to a request for a random number (col.6 lines 1-6).

Regarding claim 3, Wells teaches a plurality of registers, wherein each of the plurality of data lines couples the individual entry in the entropy register with a corresponding entry in one of the registers (col.3 line 35 thru col.4 line 1; col.6 lines 7-40).

Regarding claim 4, Wells teaches the corresponding entry in the one of the plurality of registers corresponds to the least significant bit entry in each of the plurality of registers (col.3 line 35 thru col.4 line 1; col.6 lines 7-40).

Regarding claim 5, Wells teaches the plurality of registers include a plurality of performance registers (col.3 line 35 thru col.4 line 1).

Regarding claim 6, Wells teaches the device includes a processor (col.2 lines 51-59).

Regarding claim 7, Wells teaches a bridge coupled between the memory and the device (fig.1).

Regarding claim 8, Wells teaches device is configured to cause data to be stored in the memory (fig.1; col.3 lines 14-17).

Claims 9 and 10 are substantially equivalent to claims 1 and 2 respectively, therefore claims 9 and 10 are rejected because of similar rationale.

Regarding claim 11, Wells teaches a plurality of bit lines (col.3 line 35 thru col.4 line 1; col.5 lines 60-64).

Claims 12-15 are substantially equivalent to claims 3-6 respectively, therefore claims 12-15 are rejected because of similar rationale.

Claims 16,17,18, and 19 are substantially equivalent to claims 1,2,11, and 3 respectively, therefore claims 16-19 are rejected because of similar rationale.

Regarding claim 20, Wells teaches each of the plurality of data lines couples the individual entry in the entropy register with a corresponding entry in one of a plurality of registers (col.3 line 35 thru col.4 line 1; col.6 lines 7-40).

Claim 21 is substantially equivalent to claim 4, therefore claim 21 is rejected because of similar rationale.

Regarding claim 22, Wells teaches a method of generating a random number, the method comprising:

providing a first plurality of bit entries in an entropy register (col.5 lines 60-64);  
and

transmitting a bit value from each of a plurality of registers to one of the first plurality of bit entries in the entropy register (col.6 lines 7-43; col.6 lines 60-67; col.8 lines 45-65).

Regarding claim 23, Wells teaches providing the bit values from each of the first plurality of bit entries in the entropy register (col.6 lines 60-67; col.8 lines 45-65).

Regarding claim 24, Wells teaches receiving a request for a random number (col.3 line 35 thru col.4 line 1);

wherein providing the bit values from each of the first plurality of bit entries in the entropy register comprises providing the bit values from each of the first plurality of bit



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entries in the entropy register in response to receiving the request for the random number (fig.6; col.6 lines 60-67; col.8 lines 45-65).

Regarding claim 25, Wells teaches receiving the request for the random number includes receiving a length in bits for the random number, and wherein the length in bits for the random number is less than or equal to a number of bit entries in the first plurality of bit entries (col.7 lines 21-35).

Regarding claim 26, Wells teaches prior to providing the bit values from each of the first plurality of bit entries in the entropy register,

providing a control signal to the entropy register (col.6 lines 1-6; col.6 lines 28-32), and

reading the bit values from each of the first plurality of bit entries in the entropy register (col.7 lines 1-9).

Regarding claim 27, Wells teaches a system, comprising:

a plurality of means for generating a first plurality of bits, wherein each of the plurality of means for generating the first plurality of bits generates one of the first plurality of bits (col.4 lines 35-45);

means for storing the first plurality of bits (col.9 lines 57-62);

means for providing the first plurality of bit entries to the means for storing the first plurality of bits (col.5 lines 60-64); and

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means for transmitting a bit value from each of plurality of means for generating the first plurality of bits to one of the first plurality of bit entries in the means for storing the first plurality of bits (col.5 lines 60-64).

Claims 28-30 are substantially equivalent to claims 24-26 respectively, therefore claims 28-30 are rejected because of similar rationale.

Claims 31-35 are substantially equivalent to claims 22-26 respectively, therefore claims 31-35 are rejected because of similar rationale.

Claims 36-40 are substantially equivalent to claims 22-26 respectively, therefore claims 36-40 are rejected because of similar rationale.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tremayne M. Norris whose telephone number is (703) 305-8045. The examiner can normally be reached on M-F 7:30AM-5:00PM alternate Fridays.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (703) 306-3036. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Tremayne Norris

July 19, 2004

  
**MATTHEW SMITHERS**  
**PRIMARY EXAMINER**  
*Art Unit 2137*